

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	107	((schedul\$3 execut\$3) with (parallel\$3 batch\$3 interactive) near3 (process task thread\$3) with (idl\$3 free availabl\$7) with (time cpu processor))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:52
L2	163	((schedul\$3 execut\$3) with (task\$3 process) with (idl\$3 free availabl\$7) with (time cpu processor)) same ((parallel\$3 batch\$3 interactive) near3 (process task thread\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:52
L3	51	l2 and "718"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56
L4	38	l1 and "718"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56
L5	1	l2 and 718/101.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56
L6	20	l2 and 718/102.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56
L7	7	l2 and 718/103.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56

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L8	8	12 and 718/107.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56
L9	9	12 and 718/108.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:56
L10	1	11 and 718/101.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:57
L11	15	11 and 718/102.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:57
L12	0	11 and 718/103.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:57
L13	6	11 and 718/107.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:57
L14	8	11 and 718/108.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2008/02/14 13:57

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#### 441 [Design, implementation and testing of an interactive video retrieval system](#)



Georgina Gaughan, Alan F. Smeaton, Cathal Gurrin, Hyowon Lee, Kieran McDonald  
November 2003 **MIR '03**: Proceedings of the 5th ACM SIGMM international workshop on Multimedia  
**Publisher:** ACM

Full text available: [pdf\(504.99 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [i](#)

In this paper we present and discuss the system we developed for the search task of the TRECv in an interactive search task. To do this we will look at the strategy we used in designing the system to evaluate ...

**Keywords:** interface design, system evaluation, usability testing, video analysis, video browsing

#### 442 [Question answering from the web using knowledge annotation and knowledge mining techniques](#)



Jimmy Lin, Boris Katz  
November 2003 **CIKM '03**: Proceedings of the twelfth international conference on Information and Knowledge Management  
**Publisher:** ACM

Full text available: [pdf\(190.12 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [i](#)

We present a strategy for answering fact-based natural language questions that is guided by a user queries. Our approach, implemented in a system called Aranea, extracts answers from the techniques: ...

**Keywords:** data-redundancy, semistructured data

#### 443 [Replication and retrieval strategies of multidimensional data on parallel disks](#)



Chung-Min Chen, Christine T. Cheng  
November 2003 **CIKM '03**: Proceedings of the twelfth international conference on Information and Knowledge Management  
**Publisher:** ACM

Full text available: [pdf\(197.38 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [i](#)

Aside from enhancing data availability during disk failures, replication of data is also used to speed read-intensive applications. There are two issues that need to be addressed: (a) data placement the ...

**Keywords:** disks, multi-dimensional declustering, parallel, replication

444 GADGET: a toolkit for optimization-based approaches to interface and display generation



James Fogarty, Scott E. Hudson

November 2003 **UIST '03**: Proceedings of the 16th annual ACM symposium on User interface software

**Publisher:** ACM

Full text available: [pdf\(823.58 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), ...

Recent work is beginning to reveal the potential of numerical optimization as an approach to generate displays. Optimization-based approaches can often allow a mix of independent goals and constraints that would ...

**Keywords:** display generation, layout algorithms, numerical optimization, perceptually optimized

445 Beyond AOP: toward naturalistic programming



Cristina Videira Lopes, Paul Dourish, David H. Lorenz, Karl Lieberherr

October 2003 **OOPSLA '03**: Companion of the 18th annual ACM SIGPLAN conference on Object-oriented systems, languages, and applications

**Publisher:** ACM

Full text available: [pdf\(275.64 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), ...

Software understanding for documentation, maintenance or evolution is one of the longest-standing problems in Science. The use of "high-level" programming paradigms and object-oriented languages helps, but is far from solving ...

**Keywords:** aspect-oriented programming, cognitive foundations of programming, language design

446 How java programs interact with virtual machines at the microarchitectural level



Lieven Eeckhout, Andy Georges, Koen De Bosschere

October 2003 **OOPSLA '03**: Proceedings of the 18th annual ACM SIGPLAN conference on Object-oriented systems, languages, and applications

**Publisher:** ACM

Full text available: [pdf\(348.88 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), ...

Java workloads are becoming increasingly prominent on various platforms ranging from embedded purpose computers to high-end servers. Understanding the implications of all the aspects involved in Java workloads, is thus ...

**Keywords:** Java workloads, performance analysis, statistical data analysis, virtual machine technology characterization

447 Software factories: assembling applications with patterns, models, frameworks and tools



Jack Greenfield, Keith Short

October 2003 **OOPSLA '03**: Companion of the 18th annual ACM SIGPLAN conference on Object-oriented systems, languages, and applications

**Publisher:** ACM

Full text available: [pdf\(707.51 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), ...

The confluence of component based development, model driven development and software process to application development based on the concept of software factories. This approach promises high productivity and predictability ...

**Keywords:** design patterns, domain-specific languages, model-driven development, software factories

448 Separating agreement from execution for byzantine fault tolerant services



Jian Yin, Jean-Philippe Martin, Arun Venkataramani, Lorenzo Alvisi, Mike Dahlin

October 2003 **SOSP '03**: Proceedings of the nineteenth ACM symposium on Operating systems pri

**Publisher**: ACM

Full text available: [pdf\(355.08 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

We describe a new architecture for Byzantine fault tolerant state machine replication that separa requests from *execution* that processes requests. This separation yields two fundamental and pr

**Keywords**: byzantine fault tolerance, confidentiality, reliability, security, state machine replicati

449 Beyond theory: making single-sourcing actually work



Liz Fraley

October 2003 **SIGDOC '03**: Proceedings of the 21st annual international conference on Documenta

**Publisher**: ACM

Full text available: [pdf\(230.43 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index term](#)

In this paper, I discuss how we made single-sourcing work at Juniper Networks. This is a practic problems, and successes.

**Keywords**: Arbortext, E3, Epic, FrameMaker, Interwoven, Java, Juniper Networks, TeamSite, W branching, case study, chunking, commit, documentation, modular writing, publishing, single so

450 Building a massively multiplayer game for the million: Disney's Toontown Online



Mark R. Mine, Joe Shochet, Roger Hughston

October 2003 **Computers in Entertainment (CIE)**, Volume 1 Issue 1

**Publisher**: ACM

Full text available: [pdf\(2.37 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [cited by](#), [index terms](#)

This paper presents an overview of the lessons learned building Disney's Toontown Online, a 3D game (MMP) for children ages seven and older. The paper is divided into three main parts. The 1 highlights ...

**Keywords**: 3D, Internet, computer graphics, multiplayer games, online games

451 Multimode scan: Test per clock BIST for IP cores



Adit D. Singh, Markus Seuring, Michael Gössel, Egor S. Sogomonyan

October 2003 **ACM Transactions on Design Automation of Electronic Systems (TODAES)**, v

**Publisher**: ACM

Full text available: [pdf\(168.82 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index term](#)

Built-in self-test (BIST) is an attractive design-for-test methodology for core-based SoC design l for test access when tests are generated and evaluated within the core itself. However, the scar being ...

**Keywords**: BIST, SoC, digital testing, scan

452 Abstract state machines capture parallel algorithms

Andreas Blass, Yuri Gurevich

October 2003 **ACM Transactions on Computational Logic (TOCL)**, Volume 4 Issue 4



**Publisher:** ACM

Full text available: pdf(610.28 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

We give an axiomatic description of parallel, synchronous algorithms. Our main result is that ev simulated, step for step, by an abstract state machine with a background that provides for mult

**Keywords:** ASM thesis, Parallel algorithm, abstract state machine, postulates for parallel comp

#### 453 Optimizing data aggregation for cluster-based internet services



Lingkun Chu, Hong Tang, Tao Yang, Kai Shen

October 2003 **ACM SIGPLAN Notices**, Volume 38 Issue 10

**Publisher:** ACM

Full text available: pdf(275.38 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index term](#)

Large-scale cluster-based Internet services often host partitioned datasets to provide increment aggregation of results produced from multiple partitions is a fundamental building block for the . This paper ...

**Keywords:** cluster-based network services, fault tolerance, load-adaptive tree formation, respo aggregation, throughput

#### 454 The involvement of human resources in large scale data mining projects

Markus Hofmann, Brendan Tierney

September 2003 **ISICT '03: Proceedings of the 1st international symposium on Information and con**

**Publisher:** Trinity College Dublin

Full text available: pdf(3.78 MB)

Additional Information: [full citation](#), [abstract](#), [references](#)

Data mining projects are complex and have a high failure rate. In order to improve the success only important to follow a predefined life cycle but it is also vital to the overall success of the pr

#### 455 Audio enriched links: web page previews for blind users



Peter Parente

September 2003 **ACM SIGACCESS Accessibility and Computing**, Issue 77-78

**Publisher:** ACM

Full text available: pdf(229.96 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), i

Audio Enriched Links provide previews of linked web pages to users with visual impairments. Be hyperlink, the Audio Enriched Links software presents a spoken summary of the next page inclu the current ...

**Keywords:** accessibility, speech preview, visual impairment, web page preview

#### 456 Which semantic web?



Catherine C. Marshall, Frank M. Shipman

August 2003 **HYPERTEXT '03: Proceedings of the fourteenth ACM conference on Hypertext and h**

**Publisher:** ACM

Full text available: pdf(329.99 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), i

Through scenarios in the popular press and technical papers in the research literature, the prom raised a number of different expectations. These expectations can be traced to three different p Web. ...

**Keywords:** digital libraries, hypertext, information systems, knowledge acquisition, knowledge web

457 Maximizing the spread of influence through a social network



David Kempe, Jon Kleinberg, Éva Tardos

August 2003 **KDD '03: Proceedings of the ninth ACM SIGKDD international conference on Knowledge mining**

**Publisher:** ACM

Full text available: pdf(198.28 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

Models for the processes by which ideas and influence propagate through a social network have domains, including the diffusion of medical and technological innovations, the sudden and widespread strategies ...

**Keywords:** approximation algorithms, diffusion of innovations, social networks, viral marketing

458 An evaluation of speculative instruction execution on simultaneous multithreaded processors



Steven Swanson, Luke K. McDowell, Michael M. Swift, Susan J. Eggers, Henry M. Levy

August 2003 **ACM Transactions on Computer Systems (TOCS)**, Volume 21 Issue 3

**Publisher:** ACM

Full text available: pdf(578.85 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Modern superscalar processors rely heavily on speculative execution for performance. For example, that on a 6-issue superscalar, 93% of committed instructions for SPECINT95 are speculative processor ...

**Keywords:** Instruction-level parallelism, multiprocessors, multithreading, simultaneous multithreading, level parallelism

459 OCB: A block-cipher mode of operation for efficient authenticated encryption



Phillip Rogaway, Mihir Bellare, John Black

August 2003 **ACM Transactions on Information and System Security (TISSEC)**, Volume 6 Issue 4

**Publisher:** ACM

Full text available: pdf(568.74 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

We describe a parallelizable block-cipher mode of operation that simultaneously provides privacy and authenticity: it encrypts-and-authenticates a nonempty string  $M$  using  $\text{OCB}_0(M, K)$ .

**Keywords:** AES, authenticity, block-cipher usage, cryptography, encryption, integrity, modes of operation, security, standards

460 BRIDGE over a language barrier: cross-language information access by integrating translation

Tetsuya Sakai, Makoto Koyama, Masaru Suzuki, Akira Kumano, Toshihiko Manabe

July 2003 **Proceedings of the sixth international workshop on Information retrieval with applications to the Internet**, Volume 11

**Publisher:** Association for Computational Linguistics

Full text available: pdf(122.39 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

This paper describes two new features of the BRIDGE system for cross-language information access: a *partial disambiguation* function of the Bi-directional Retriever, which can be used for search requests in a second language ...





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#### 461 [Large-scale network simulation techniques: examples of TCP and OSPF models](#)

Garrett R. Yaun, David Bauer, Harshad L. Bhutada, Christopher D. Carothers, Murat Yuksel, Shivku  
July 2003 **ACM SIGCOMM Computer Communication Review**, Volume 33 Issue 3

**Publisher:** ACM

Full text available: [pdf\(587.00 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#)

Simulation of large-scale networks remains to be a challenge, although various network simulation  
paper, we identify fundamental issues for large-scale networks simulation, and propose new tec  
First, we ...

**Keywords:** OSPF, TCP, large-scale network simulation, optimistic synchronization protocol

#### 462 [Improving legal quality: an application report](#)

Tom M. van Engers, Margherita R. Boekenoogen  
June 2003 **ICAIL '03: Proceedings of the 9th international conference on Artificial intelligence a**

**Publisher:** ACM

Full text available: [pdf\(234.73 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index term](#)

Problems with legal quality will not only increase effort and costs of the law enforcement organisa  
the regulating power of the legislator. Unintended use or even abuse of the law may be the resu  
should ...

**Keywords:** AI and law, knowledge engineering, knowledge modeling, knowledge representation  
and validation

#### 463 [Inferential queueing and speculative push for reducing critical communication latencies](#)

Ravi Rajwar, Alain Kägi, James R. Goodman  
June 2003 **ICS '03: Proceedings of the 17th annual international conference on Supercomputing**

**Publisher:** ACM

Full text available: [pdf\(568.93 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [i](#)

Communication latencies within critical sections constitute a major bottleneck in some classes o  
workloads. In this paper, we argue for the use of Inferentially Queued Locks (IQLs) [31], not ju  
synchronization but also ...

**Keywords:** data forwarding, inferential queueing, synchronization

464 Designing effective program visualization tools for reducing user's cognitive effort



M. Eduard Tudoreanu

June 2003

**SoftVis '03:** Proceedings of the 2003 ACM symposium on Software visualization

**Publisher:** ACM

Full text available: [pdf\(2.55 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

Program visualization holds great potential for conveying information about the state and behavior. However, barriers exist to the realization of this potential, and the limited knowledge about the visualization ...

**Keywords:** automatic presentation, cognitive economy, program visualization, user studies

465 Optimizing data aggregation for cluster-based internet services



Lingkun Chu, Hong Tang, Tao Yang, Kai Shen

June 2003

**PPoPP '03:** Proceedings of the ninth ACM SIGPLAN symposium on Principles and practice of programming

**Publisher:** ACM

Full text available: [pdf\(275.38 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index term](#)

Large-scale cluster-based Internet services often host partitioned datasets to provide incremental aggregation of results produced from multiple partitions is a fundamental building block for the ... This paper ...

**Keywords:** cluster-based network services, fault tolerance, load-adaptive tree formation, response aggregation, throughput

466 Bitslice: representation without taxation



Robert Bernecky, Peter Wooster

June 2003

**APL '03:** Proceedings of the 2003 conference on APL: stretching the mind

**Publisher:** ACM

Full text available: [pdf\(105.97 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#)

We describe bitslice, a high-performance utility for parallel bit-level indexing of array data. We demonstrate the importance of bit arrays as a fundamental data type and of being able to view array level. ...

467 DiST: a simple, reliable and scalable method to significantly reduce processor architecture



Sylvain Girbal, Gilles Mouchard, Albert Cohen, Olivier Temam

June 2003

**SIGMETRICS '03:** Proceedings of the 2003 ACM SIGMETRICS international conference on modeling of computer systems

**Publisher:** ACM

Full text available: [pdf\(1.32 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

While architecture simulation is often treated as a methodology issue, it is at the core of most processor research works, and simulation speed is often the bottleneck of the typical trial-and-error research simulation ...

**Keywords:** distributed simulation, processor architecture

## 468 Large-Scale TCP Models Using Optimistic Parallel Simulation

Garrett Yaun, Christopher D. Carothers, Shivkumar Kalyanaraman

June 2003      **PADS '03:** Proceedings of the seventeenth workshop on Parallel and distributed simulation

**Publisher: IEEE Computer Society**

Full text available:  pdf(207.99 KB)  [Publisher Site](#) Additional Information: [full citation](#), [abstract](#), [cited by](#), [index term](#):


Internet data traffic is doubling each year, yet bandwidth doesnot appear to be growing as fast . shortfalls in available bandwidth, particularly at the "last mile" mayresult. To address these bandwidth congestionproblems, ...

469 DiST: a simple, reliable and scalable method to significantly reduce processor architecture

Sylvain Girbal, Gilles Mouchard, Albert Cohen, Olivier Temam

June 2003 **ACM SIGMETRICS Performance Evaluation Review**, Volume 31 Issue 1

**Publisher: ACM**

Full text available:  pdf(1.32 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), .

While architecture simulation is often treated as a methodology issue, it is at the core of most p research works, and simulation speed is often the bottleneck of the typical trial-and-error resea simulation ...

**Keywords:** distributed simulation, processor architecture

470 Efficient use of memory bandwidth to improve network processor throughput

Jahangir Hasan, Satish Chandra, T. N. Vijaykumar

June 2003 **ISCA '03:** Proceedings of the 30th annual international symposium on Computer arc

**Publisher: ACM**

Full text available:  [pdf\(184.83 KB\)](#).

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#)


We consider the efficiency of packet buffers used in packet switches built using network process typically implemented using DRAM, which provides plentiful buffering at a reasonable cost. The a ...

## 471 Maintaining variance and k-medians over data stream windows

Brain Babcock, Mayur Datar, Rajeev Motwani, Liadan O'Callaghan

June 2003     **PODS '03:** Proceedings of the twenty-second ACM SIGMOD-SIGACT-SIGART symposium on database systems

**Publisher: ACM**

Full text available:  [pdf\(253.00 KB\)](#).

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), [i](#)

The sliding window model is useful for discounting stale data in data stream applications. In this continually and only the most recent  $N$  elements are used when answering queries. We present solving ...

472 Server scheduling in the  $L_p$  norm: a rising tide lifts all boat

Nikhil Bansal, Kirk Pruhs

June 2003      **STOC '03:** Proceedings of the thirty-fifth annual ACM symposium on Theory of comp

**Publisher:** ACM

Full text available:  pdf(249.70 KB)

**Additional Information:** [full citation](#), [abstract](#), [references](#), [cited by](#), [i](#)

Often server systems do not implement the best known algorithms for optimizing average Quality of Service (QoS) and fairness ...

**Keywords:** flow time, multilevel feedback, resource augmentation, scheduling, shortest elapsed time, shortest remaining processing time

473 Estimating compilation time of a query optimizer



Ihab F. Ilyas, Jun Rao, Guy Lohman, Dengfeng Gao, Eileen Lin

June 2003 **SIGMOD '03:** Proceedings of the 2003 ACM SIGMOD international conference on Management of data

**Publisher:** ACM

Full text available: pdf(292.76 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#).

A query optimizer compares alternative plans in its search space to find the best plan for a given search space and the enumeration algorithm, optimizers vary in their compilation time and the quality of the plans they produce ...

474 Testing subgraphs in directed graphs



Noga Alon, Asaf Shapira

June 2003 **STOC '03:** Proceedings of the thirty-fifth annual ACM symposium on Theory of computation

**Publisher:** ACM

Full text available: pdf(220.89 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#).

Let  $H$  be a fixed directed graph on  $h$  vertices, let  $G$  be a directed graph on  $n$  vertices and suppose  $G$  has to be deleted from it to make it  $H$ -free. We show that in this case  $G$  contains at least  $f(\epsilon, H)n$  edges.

**Keywords:** directed graphs, property testing, regularity lemma

475 DISE: a programmable macro engine for customizing applications



Marc L. Corliss, E. Christopher Lewis, Amir Roth

June 2003 **ISCA '03:** Proceedings of the 30th annual international symposium on Computer architecture

**Publisher:** ACM

Full text available: pdf(335.30 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#).

**Dynamic Instruction Stream Editing (DISE)** is a cooperative software-hardware scheme for customizing application functionality---e.g., safety/security checking, profiling, dynamic code decompression, and instruction stream editing---to an application. ...

476 A tight time lower bound for space-optimal implementations of multi-writer snapshots



Panagiota Fatourou, Faith Fich, Eric Ruppert

June 2003 **STOC '03:** Proceedings of the thirty-fifth annual ACM symposium on Theory of computation

**Publisher:** ACM

Full text available: pdf(232.46 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#).

A snapshot object consists of a collection of  $m > 1$  components, each capable of storing a value. In an asynchronous shared-memory distributed system. It supports two operations: a process can update a component and a process can read a component.

**Keywords:** lower bounds, shared-memory distributed computing, snapshot, space-optimal

**477** Optimal sharing of bags of tasks in heterogeneous clusters



Micah Adler, Ying Gong, Arnold L. Rosenberg

June 2003 **SPAA '03**: Proceedings of the fifteenth annual ACM symposium on Parallel algorithm

Publisher: ACM

Full text available: pdf(289.05 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), i

We prove that "FIFO" worksharing protocols provide asymptotically optimal solutions to a problem of identically complex tasks in a heterogeneous network of workstations (HNOW)  $n$ . In the HNOW, each workstation seeks ...

**Keywords:** bags of tasks workloads, cluster computing, heterogeneous NOW, network of works

**478** Integrated prefetching and caching in single and parallel disk systems



Susanne Albers, Markus Büttner

June 2003 **SPAA '03**: Proceedings of the fifteenth annual ACM symposium on Parallel algorithm

Publisher: ACM

Full text available: pdf(210.52 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), i

We study integrated prefetching and caching in single and parallel disk systems. There exist two algorithms called *Aggressive* and *Conservative* for minimizing the total elapsed time in the single disk system.

**Keywords:** caching, magnetic disk systems, prefetching

**479** Interaction design case: VasSol CANVAS



Brian Herzfeldt, Marc Rettig

June 2003 **DUX '03**: Proceedings of the 2003 conference on Designing for user experiences

Publisher: ACM

Full text available: pdf(340.80 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

CANVAS is a software product from VasSol, Inc., which uses input from MRI scanners to create a 3D model of a patient's vasculature and accurately calculate blood flow. This case study reports on a nine-month effort to design and implement a commercial ...

**Keywords:** brand, collaboration, contextual inquiry, corporate identity, healthcare, human-computer interaction, design, interface design, medical imaging, observation, user research, user-centered

**480** ANODR: anonymous on demand routing with untraceable routes for mobile ad-hoc network



Jiejun Kong, Xiaoyan Hong

June 2003 **MobiHoc '03**: Proceedings of the 4th ACM international symposium on Mobile ad hoc

Publisher: ACM

Full text available: pdf(236.79 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [cited by](#), i

In hostile environments, the enemy can launch traffic analysis against interceptable routing information messages and data packets. Allowing adversaries to trace network routes and infer the motion of those ...

**Keywords:** anonymity, broadcast, mobile ad-hoc network, on-demand routing, pseudonymity,